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Cultural Landscapes: The Intent and the Tenor of the Times

Gerald D. Patten

When the Olmsteds created the landscapes we now preserve, the intent of their work was clear. In their designs and in their advocacy for public parks, they were creating a link between people and their environment in response to the tenor of the times, an America experiencing rapid growth and social change. Now, we too have an opportunity to respond to the tenor of our time—the growing urgency of recognizing and protecting our legacy of cultural landscapes for their historical value and for their contribution to society today, before it's too late. To be successful, we in the National Park Service must join with other organizations and individuals to articulate our intent and develop an action agenda for preservation of our remarkable heritage of landscapes. Our primary tasks are to provide national leadership, demonstrate high quality preservation practice, support local efforts, and foster a connection between the public and this landscape legacy.

Effective national leadership starts with determining what is important and what needs protection. It is critical that we begin a National Historic Landmark theme study to systematically evaluate cultural landscapes nationwide. A completed theme study will focus our efforts and position us to lead.

In the National Park Service today, we have the beginnings of a dynamic cultural landscape program— due to the efforts of a few dedicated and talented people. Through production of site-specific inventories, landscape histories, and treatment plans, we in the National Park Service and others working on landscape preservation, have begun to demonstrate high quality preservation practice. Development of the first set of the *Secretary of the Interior's Guidelines for the Treatment of Historic Landscapes* is in progress and will provide guidance to the National Park Service as well as to other organizations working on historic landscapes. Excellent progress also is being made in the development of professional curricula. Training programs for site managers, maintenance staff, and State Historic Preservation Offices are underway. The application of computer technology for landscape preservation continues to be refined. The articles in this issue of *CRM* illustrate the state of the art in planning, surveying, evaluating, and implementing sound landscape preservation treatments.

In recent years, many cities and towns have rediscovered their rich cultural landscape heritage and have begun to actively improve maintenance and initiate preservation projects. In other areas, communities are organizing to preserve farmland and traditional open space because these areas give their communities character and distinction, and because it makes the place feel like home. These examples and others illustrate that people value cultural landscapes today for their history and for the amenities they provide. It is this affinity for the landscape and the ability of the landscape to connect us to other people which Olmsted, Sr. understood and called "communicativeness." This is an area we have yet to fully explore. Cultural landscapes have broad appeal and thus offer unique opportunities for education and interpretation. These landscapes may also be the place to study and demonstrate sustainable ways to live, lessons of great value today.

As we continue our efforts in landscape preservation, we will undoubtedly be faced with many dilemmas and questions. If our intent is to foster recognition and build public awareness and support for preservation of our landscape heritage, we must work in partnerships. These partnerships will ensure the development of a shared vision for

landscape preservation one that reflects the value of landscapes to the professionals and to the public and that employs an approach to preservation that is responsive to the tenor of our times.

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Historic Residential Landscapes in Georgia: The Georgia Living Places

Richard Clous

Historic landscapes have long been a part of Georgia's historic preservation program. As early as 1975, Frederick Law Olmsted's Druid Hills Parks and Parkways were nominated to the National Register of Historic Places for their landscape significance. In 1980, the Nacoochee Valley National Register nomination set precedents for the identification and evaluation of rural landscapes. Starting in the late 1970s, a series of historic district nominations for small-town neighborhoods stressed their historic landscape features including tree-lined streets and unfenced yards. These neighborhood nominations were of special interest since 80% of Georgia's historic structural properties are residential in nature and two-thirds of them are located in the state's cities and towns.

In 1989, we had the opportunity to focus attention on the state's historic residential landscapes. A private donor offered funding for the study of what came to be known as "Georgia's Living Places" historic houses, their landscaped yards, and associated archeological resources. In response to this offer, our office planned and carried out a two-year project that has vastly increased our knowledge of the state's historic residential landscapes as well as its residential architecture and domestic archeology.

The first step of the Georgia's Living Places (GLP) project was data collection. Although existing surveys cover much of the state, many of them are outdated, and few contain reliable information about historic residential landscapes. Our new survey program, implemented in 1988, provided a way of collecting and analyzing up-to-date survey data, including basic information about landscapes, but few new surveys had been completed. Therefore, at an early point in the GLP project, special sample surveys of nine counties representing a cross-section of the state were commissioned. Information from these sample surveys was combined with that from all other recent surveys to form the raw database for the project. This data was augmented by information obtained through computer analysis of the state's National Register inventory.

While the field surveys were being conducted, literature searches were carried out by experts in the fields of Georgia history, architectural history, historic archeology, and landscape history. Catherine Howett, landscape architect and professor at the University of Georgia's School of Environmental Design, researched Georgia's landscape history. Sources of information identified and examined during the course of the study included books, periodical articles, published and unpublished manuscripts, theses and dissertations, field survey reports, and National Register. Upon completion of the data collection phase of the project, information was analyzed and reports were written by the consultants and our Survey and Register staff. These reports document, in general, the historic development of residential properties in Georgia. They also define residential architectural styles and vernacular house types, identify major forms of residential landscapes, and describe the archeological resources associated with residential properties. Taken together, these reports constitute a historic context statement form Georgia's Living Places.

Nine major forms of historic residential landscaping in Georgia were identified through the GLP project.

Among the earliest and most basic forms of historic residential landscaping in Georgia is the **landscape of work**. As its name implies, the landscape of work is, first and foremost, a functional landscape. Usually agricultural, and often subsistence, its major components include a farmhouse, outbuildings, and outdoor activity areas tied together by a network of fences, paths, and functional sight lines.

Contemporary with the landscape of work but radically different in concept and appearance is the **ornamental yard**. Inspired by the landscaping of 18th-century English

estates, this extremely popular form of landscaping transformed some, if not all, of the landscape of work into a work of landscape architecture.

Its characteristic feature is a central core of formal landscaping, primarily aesthetic in nature, around or adjacent to the house, itself surrounded by the landscape of work.

A vernacular interpretation of the ornamental yard, known as the **swept yard**, was common throughout Georgia during the 18th and 19th centuries but has virtually disappeared from today's landscape. As its name suggests, the swept yard features a dirt yard cleanly swept of all grass, weeds, and other ground cover. Sometimes sprinkled with a thin layer of sand, the ground surface was frequently "finished off" with sweeping ornamental patterns.

Downingesque landscaping was introduced to Georgia toward the middle of the 19th century. As its name suggests, it was inspired by the work of Andrew Jackson Downing. In Georgia, as elsewhere, Downingesque landscaping was a popular interpretation of contemporary "English" landscaping. Informal in appearance, these landscapes feature a picturesque or naturalistic aesthetic. Trees, shrubbery, and open lawn are the major landscape elements. For a variety of reasons—some practical, some aesthetic, some even political—Downingesque landscapes were not popular in Georgia and are extremely rare today.

Coinciding with the introduction of Downingesque landscapes to Georgia was a landscaping phenomenon that some historians have called the **horticultural landscape**. The horticultural landscape featured exotic specimen plants from all over the world. These plants were usually worked into existing landscapes, although sometimes an entire yard was arranged to show off the specimen plants. At its extreme, the horticultural landscape took on a plants-for-plants' sake character. Generally, only vestiges of horticultural landscapes survive today.

During the latter decades of the 19th century, landscaping activity in Georgia reached an all-time high. Corresponding to the social and economic development of Henry Grady's "New South," this popular landscape movement has been named **New South landscaping**. Its chief characteristic is an informal, almost casual quality. Indeed, the appearance of New South landscaping is described by one landscape historian as "picturesque randomness" a direct parallel to the picturesque eclecticism of Victorian-era architecture. New South landscaping literally transformed the appearance of Georgia. It was most pronounced in towns and cities, however, where increasing numbers of new houses were being built to accommodate Georgia's rapidly growing population. In this urban environment—house after house, newly built, with newly landscaped yards—the New South landscape movement produced yet another new landscape form: the landscape of the residential neighborhood, with its tree-lined streets and unfenced yards.

At the turn of the century there was a backlash against the picturesque randomness of New South landscaping, just as there was a reaction against the picturesque eclecticism of late Victorian architecture. **Landscape revivals** loosely based on historical precedents became popular in new suburban developments and on country and urban estates. The style of landscaping often corresponds with that of the architecture: an "Italian" landscape for a Renaissance Revival house, for example, or an "English" landscape for a Tudor residence.

Shadowing the turn-of-the-century landscape revivals, but contrasting with them in virtually every respect, is what might be called **Craftsman landscaping**. Paralleling the popularity of Craftsman-style architecture, and inspired by the same interest in the arts and crafts, Craftsman landscaping is the standard accompaniment to the many new bungalow homes built in Georgia's cities and towns during the early 20th century. Craftsman landscapes present a cozy, homey quality, informal but not random, with an emphasis on natural materials, and carefully crafted to make the most of small suburban lots.

The early 20th century brought a new development in Georgia's residential landscaping: the large-scale **landscaped suburb**. These new developments generally conformed to the proven model of the American "garden" suburb. Their distinguishing characteristics include an irregular and curvilinear arrangement of streets, relatively large and

irregularly shaped lots, retention of unbuildable lots as natural open space, and retention of existing natural features including topography and trees. Because they were frequently developed by a single developer, and often according to a master plan, these suburbs present a landscape characterized by uniformity.

By identifying and classifying the major forms of historic residential landscapes in Georgia, the GLP project has increased our knowledge of these important resources. This has allowed us to broaden the scope of our state historic preservation program. In general, we are now much better able to provide technical assistance on a variety of preservation activities involving residential landscapes. We have a new and useful way of measuring the significance of residential landscapes; this makes it easier to recognize historic landscape forms, identify and evaluate their significant features, assess their integrity, and conduct comparative analyses. The effects of new development as well as the compatibility of proposed landscape treatments can be better determined. Plans for the preservation of residential landscapes can be formulated with greater assurance that the historic qualities and features that make these landscapes significant will be preserved.

Above and beyond this general upgrading of our state historic preservation program, the GLP project with its landscape component has three specific applications. One has been accomplished; another is underway; the third is planned for the upcoming year.

Earlier this year, the GLP project served as the basis for our annual state historic preservation conference. A notebook summarizing the results of the GLP project was distributed to all who attended the conference. This information was augmented through workshops and topical sessions. In the landscape track, the nine major forms of historic residential landscapes in Georgia were illustrated, and guidelines for their preservation were presented.

Currently, the GLP historic context statement including its residential landscape component is being reformatted into a National Register multiple property documentation form. With the addition of a statement of significance, registration requirements, and other technical information, this document will serve as the basis for future National Register nominations of Georgia's "living places." It is hoped that this technique will expedite the nomination of historic residential properties so more homeowners can take advantage of Federal and state benefits of National Register designation.

In the upcoming year, the information contained in the GLP reports, the conference notebook, and the multiple property documentation form will be compiled into a published handbook on Georgia's Living Places. Intended for widespread distribution to a general audience, and specifically to owners of historic residential properties, the handbook will include information on Georgia's residential landscapes and how to preserve them.

Above and beyond these program benefits, the GLP project has shown that historic landscapes, including those that are residential in nature, can and should be considered significant historic resources, in and of themselves, equal in importance to their accompanying historic buildings, and equally worthy of preservation.

A more sobering realization is that historic landscapes are harder to deal with than historic buildings. Historic landscape forms are not as readily apparent as architectural styles or vernacular building types, and they change with the seasons and with the passage of time. Knowledge and expertise regarding historic landscapes are not as readily available. Quite frankly, special skills, knowledge, and interest are prerequisites to coping successfully with these problems.

Another sobering fact brought to light by our GLP project is that there continues to be a great gulf—narrowing, to be sure, but still great—between academic interest in high-style, designed landscapes and preservation activities involving more mundane, everyday landscaping. Our GLP project attempted to bridge this gulf by combining scholarly perspective with the results of field surveys and preservation projects.

The GLP project also heightened our appreciation of regional differences in historic landscapes. While landscaping in Georgia conforms in general to national trends, it has been influenced by distinct regional factors including climate, geography, social conventions,

aesthetic preferences, agricultural activities, attitudes toward the land, and even politics. This has given rise to equally distinctive regional landscape characteristics.

Finally—and seemingly in contradiction to my first observation—the GLP project has convinced us of the benefits of looking at residential landscapes not in isolation but in the historic and environmental context of residential properties as a whole—the house, the yard, and the grounds containing associated archeological resources. Only in this way can the full value of historic residential landscapes be measured: as significant landscapes, but also as companion pieces to historic houses, as settings for outdoor activities and events, for their associations with the families and individuals who owned and lived on the property, and as both generators and protectors of the property's archeological record. This synthesis of historic resources—architectural, landscape, and archeological—along with historic associations is what has given the GLP project its special impact. It is also what makes historic residential properties truly "living places."

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Documenting Historic Parks in the Nation's Capital

Elizabeth Barthold

The circles, squares, and triangles generously distributed throughout Washington, D.C., are some of the Nation's oldest and smallest national parks. Integral elements of the city plan designed by Frenchman Pierre L'Enfant in 1791 under the supervision of George Washington, these parks, or "reservations," are the subject of a two-year Historic American Buildings Survey (HABS) documentation project. The study encompasses parks ranging from large circles and squares featuring statues, fountains, and greenery to 400-square-foot sodded plots abutting private residences. Acquired by the Federal Government 200 years ago, these parks and parklets now create welcome, green breathing spaces amid concrete and asphalt.

Because the reservations are situated at intersections of the busiest thoroughfares—and are legally within street rights-of-ways—their existence has always been precarious. As early as 1802 critics who believed they were created by mistake suggested the parklets be merged with adjacent squares or sold for private development. They were rescued from private interests, however, by President Washington's declaration that "nothing ought to justify a departure from the engraved plan but the probability of some great public benefit, or unavoidable necessity." More recently, urban redevelopment and the advent of the automobile have taken a toll. Many parks have been pared down for street widening, dissected for channelization, tunneled under, paved over, built upon, or entirely lost in a spaghetti of freeways. Yet more than half remain intact. Approximately 150 are maintained by the National Park Service (NPS), and more than 70 are under the jurisdiction of the District of Columbia.

During the HABS recording project, each reservation within the boundaries of the L'Enfant plan (bounded on the south by the two rivers and the north by Florida Avenue) was examined and photographed. Park furniture, plantings, vistas, and current conditions were described on field forms, then field notes and historical information were entered into the National Register's experimental Integrated Preservation Software (IPS) database adapted to meet the specific needs of the study. The software includes data fields to satisfy requirements of the NPS List of Classified Structures (LCS), the National Register nomination form, and the District of Columbia's Office of Historic Preservation. To calculate the historic integrity of the L'Enfant plan, the database also includes entries for the historic parks that have been destroyed.

The HABS 1990-91 survey is the latest in a series of attempts to manage and maintain this huge system of national capital parks. Previous surveys from the 1870s, 1890s, 1920s, and 1930s were used as models for the current study and provided important historical information.

The most valuable historical resources employed are detailed annual reports and maps published by the Army Corps of Engineers, who were in charge of the Office of Public Buildings and Grounds (OPB&G) from 1867 to 1933. Although the reservations were an inherent part of L'Enfant's plan, most were not identified until the 1870s, when bordering roadbeds were graded and paved. An Army Corps map published in 1894 (figure 1) instituted the numbering system still used today. Of the 301 reservations identified that year, 92 were highly improved—featuring grass, fences, coping and in cases of larger parks, trees, shrubs, flower beds, lamps, fountains, and statues; 41 were graded, awaiting further improvement; and 168 were entirely unimproved. By 1896, 15 statues embellished the public grounds—all but 3 honoring war heroes and 7 on horseback. Due to scanty congressional funds, however, park improvements came slowly. To prevent illegal

occupation, the reservations were marked with granite blocks carved with "U.S." or "O.P.B. & G." that remain in many places today (figure 2).

In 1902, the McMillan Commission presented the plan now credited with the redesign of the city's central monumental core and regional development over the first half of the 20th century. Although the McMillan plan was promoted as a revival of L'Enfant's vision, it posed drastic changes to his design. For instance, the erection of Union Station resulted in the "alienation" of 17 of the original 301 reservations and began a trend of land transfers from the park system that would continue throughout the 20th century. Later, the McMillan-inspired Federal Triangle construction closed several streets and one entire avenue. Yet the commission's guiding principle—that the city should be treated as a work of civic art—clearly echoed that of L'Enfant. The commission lauded L'Enfant's integration of green spaces into the historic city, and recommended more be created in the remaining four-fifths of the District beyond the Florida Avenue boundary. Its report faintly praised the Army Corps work and recommended individualized treatment of parks, more recreational facilities, and a more artistic integration of memorial fixtures in the landscape.

These ideals guided park design for decades to come and were promoted by OPB&G landscape architects such as George Burnap who criticized the "plethora of petrified generals" in Washington's parks and recommended memorial fountains, benches, and special plantings instead of commemorative statuary. He advocated park designs that would meet local needs: "passing through" parks in business districts featuring pathways on direct lines of travel for harried businessmen, "passing around" parks on busy automotive thoroughfares to provide greenery visible from streets and sidewalks, and playgrounds in residential neighborhoods to promote healthy recreation for urban children.

As the city grew beyond the L'Enfant plan and the park system was expanded, the OPB&G was reorganized in 1925 as the Office of Public Buildings and Public Parks (OPB&PP). Still controlled by the Army Corps, the OPB&PP photographed each reservation in the late 1920s and drew individual site plans to help manage the almost 600 reservations encompassing more than 3,500 acres. These photographs, and similar ones taken in the 1930s to document Works Progress Administration improvements, provide an invaluable glimpse of the historic reservations during this transitional era.

Jurisdiction of Washington's parks was transferred to the National Park Service in 1933, but since then, control over many of the reservations has been relinquished to the District of Columbia. The reservations within the L'Enfant plan boundaries now comprise only a small segment of the National Capital park system, and while the Mall and major parks receive careful and regular maintenance, many of the smaller parks outside of the monumental core are neglected. With management now divided, the HABS project, encouraged by both the District of Columbia and the National Park Service, will serve as a baseline inventory, historical context, and description of these too ephemeral features of the L'Enfant plan of Washington.

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Canyon De Chelly—An Ethnographic Landscape

Jill Cowley

A place to be spiritually refreshed and renewed—a place to collect plants for traditional ceremonies—a farm and a home site—an interesting and beautiful landscape to visit—the landscape of Canyon de Chelly has different meanings and roles for different people.

An ethnographic landscape can be thought of as a landscape as seen through the eyes of a specific culture, or the combination of several specific cultures. The ethnographic landscape is associated with cultural practices or beliefs of a living community that are rooted in the history of the community, and that are important in maintaining the continuing cultural identity of the community (NPS 1985; National Register Bulletin No. 38). The community could reside outside or within the landscape. Canyon de Chelly National Monument in Arizona is a good example of a landscape with the meaning to several different cultural groups.

Canyon de Chelly National Monument was established in 1931. The deeply-incised and steep-walled sandstone canyons of the monument are rich in archeological sites from the Anasazi, Navajo, and other cultures. Located within the Navajo Reservation, the Navajo Tribe retains ownership of the land. A number of Navajo families live and farm within the canyons, as they have done for centuries. The National Park Service has been charged primarily with managing cultural resources and providing for visitor use.

The Navajo, some Pueblo groups, and other American Indian groups have a long and deeply spiritual traditional history of interaction with the Canyon de Chelly landscape. It is the heart of the Navajo homeland, and was a stronghold during historical conflicts with the Spanish, Mexicans, and Anglo-Americans. The area is now visited by people of different cultural backgrounds from all over the world. Navajo people from the immediate area, Navajos from outside the local area, members of other American Indian groups, and nonIndian visitors from all over the United States and the world, especially Europe, make up the diversity of visitors. Each of these groups value the same landscape for different reasons, and the ethnographic landscape is defined by the overlay of these different values and meanings.

The recently-completed Joint Management Plan (JMP) for Canyon de Chelly recognized the diversity of groups who value and use the canyon (NPS 1990; Mitchell 1987). Because the National Park Service has the charge to manage cultural resources and provide for quality visitor experiences while recognizing and being sensitive to traditional and contemporary users, especially canyon residents, the JMP calls for a multifaceted cultural research program, with focus on a Cultural Landscape Report/Management Plan (CLR). The CLR would ideally combine the results of a number of studies, including an Ethnographic Overview and Assessment, Ethnographic Resources Inventory, Visitor Use and Attitude Study, Visual Quality and Preferences Study, and Archeological and Historic Resource Studies, into a document that develops specific guidelines on managing the landscape. One of the important JMP concerns was monitoring "scenic quality," as development progresses. The different cultural viewpoints toward landscape, "scenic quality" and development are important in determining what management positions could be on future development (NPS 1990; Mitchell 1987).

Several of the above-mentioned studies are underway. One of these is the Ethnographic Resources Inventory. The objectives of the inventory, being completed by the Navajo Nation Historic Preservation Department (NNHPD) for the National Park Service, is to identify traditional cultural and natural resources considered culturally important to contemporary Navajos and other American Indian groups, to identify how these places are used and the basis for their meaning, and how those who use and value these places feel

about various management strategies (NNHPD 1990). Responsibility for the inventory study lies with a senior NNHPD cultural anthropologist with many years of experience conducting research on land use issues on the Navajo Reservation (Kelley 1986).

The "culturally important" places identified in the inventory include places with traditional use, legendary, historic, subsistence, medicinal or dietary, residential, and other value to contemporary people (NNHPD 1990). Field interviews with Navajos knowledgeable of traditional values were conducted. Those interviewed were a mix of traditional elders, medicine men, tour guides, teachers, and Chapter officials who have conducted ceremonies and collected ceremonial materials within the canyons and who know the traditional and historic stories associated with the canyons (NNHPD 1990).

Preliminary findings show that there are many, many places of traditional and sacred importance, both discrete sites, such as rock outcrops and shelters, Anasazi pueblos, former Navajo dwelling places, springs and water junctions, and larger areas, such as mountains and whole canyons. From a Navajo perspective, these places, and also the ceremonial approaches to them, are significant for various reasons, including association with Navajo and other Indian origin stories, association with traditional spiritual beings or events, and locations of traditional ceremonial materials. These places or features may be used by communities, families, or individuals, and even if not being visited and used, these places are actively in people's minds (NNHPD 1990).

Major concerns expressed by respondents are intrusion by non-residents into canyon homes, sacred areas, and ceremonies; resource degradation; erosion, which affects the ability to farm in the canyons; and canyon residents not getting a fair share of tourist income. One major preliminary recommendation from the study is the need to educate and, where necessary, regulate tourists, researchers, and others about what type of behavior is appropriate or not appropriate within the canyons, and what places are off limits (NNHPD 1990).

The legitimate needs and desires of visitors to learn, understand, and experience the landscape, and the cultural contexts they bring to the park, are valid. They may develop their own personal identification with the landscape, associated with a personal or group mythology from their own culture. This is also valid information to add to the overall understanding of the ethnographic landscape. An understanding of these associations and meaning is important to the development of a quality interpretation and visitor use program. However, as anywhere else, visitors need to understand the cultural differences and respect the needs of residents. Visitors need to understand that some places are off limits to them to visit and to learn about. As the park staff has suggested, visitors can apply the understanding of special places as Canyon de Chelly to a greater appreciation of special places in their own landscapes.

The need for confidentiality of information and the ramifications of identifying sensitive or sacred areas is a critical study issue. A number of measures are taken within the contracting process to ensure confidentiality of information. For example, code names are used for interviewees. Direct quotes are not used unless the interviewee agrees to the use of a quote with full understanding of the potential effects of being identified and after signing a release form. Access to site location maps is strictly controlled by the contractor and the park superintendent, and distribution of the study reports themselves is limited and controlled. Information related to sensitive places or features is exempt from the Freedom of Information Act requests (NPS 1985). Restrictions on distribution of information also applies to interpretive programs, where use of certain information would not be appropriate because of its sensitivity, even though it may enrich visitor's understanding. In general, the need for confidentiality must be assumed unless there is explicit consensus of local residents advocating disclosure (NNHPD 1990).

Due to highly individual nature of values and uses assigned to specific sites within the canyons, generalizing study results to the whole Navajo community is not possible. The inventory study serves as a guide and initial reference for a program of ongoing dialogue between the park and traditional users (NNHPD 1990). Future work on the Ethnographic

Resources Inventory, and the visitor and visual quality studies, will gather more information which will help park management understand more fully the different dimensions of the ethnographic landscape at Canyon de Chelly.

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The Presidio of San Francisco's Cultural Landscape

Carey Feierabend

At the edge of the Golden Gate lies the Presidio of San Francisco, a National Historic Landmark whose military history spans more than 200 years. As one of the first European settlements in the Bay area, the Presidio has witnessed three nations' flags of occupation since its founding in 1776 and is currently the headquarters for the Sixth US Army. The Presidio is scheduled to close as an Army base by 1995, and will become part of Golden Gate National Recreation Area (GGNRA). As a result, the National Park Service is preparing an amendment to the General Management Plan (GMP) for GGNRA to determine what kind of a park the Presidio will be. A Presidio Planning Team has been assembled to undertake a two-year planning effort to chart a course for the Presidio's future. As part of the planning process and the data collection necessary for the GMP amendment, a cultural landscape analysis is being conducted by an interdisciplinary team.

The Presidio contains a complex layering of both cultural and natural resources, whose composition make it significant as a national landmark. The intent of the cultural landscape analysis is to distill the dense, physical layers of history at the Presidio in order to understand the place as a complex yet integrated system, rather than as a collection of isolated buildings, roads, and natural resources, and yield essential information for planning. The identification of significant discrete features, as well as overall patterns and linkages, will provide an opportunity for sensitive integration of the new with the old. Former layers and their associated features that are critical to an understanding of the Presidio's evolution and significance as a National Landmark will be exposed, enhanced, and preserved rather than obscured in the process of accommodating new uses and needs. In this manner, the analysis of the cultural landscape will guide management decisions, integrating both cultural and natural resources.

The Presidio is a 1,400-acre "city within a city" composed of approximately 870 buildings, of which over 400 are historically significant. The types of facilities which exist today include two hospitals, a major research institute, 1200 housing units, a golf course, a national cemetery, a 1920s airfield and associated structures, an intact array of harbor and coastal defense structures, a Mission Revival style coastal artillery sub-post, a former U.S. Coast Guard station, and other support facilities critical to the operation of the Presidio as a distinct community. In addition, resources include a mature forest dominated by eucalyptus, Monterey pine, and Monterey cypress planted in the 1880s; the last free-flowing creek in San Francisco; federally- and state-listed rare, threatened and endangered plant and animal species; remnant native plant communities; and potentially significant archeological resources.

The Presidio's role in military history has resulted in a vast range of military architecture and engineered structures that spans its development. Its site planning, landscape design, and engineering represent departures from traditional Army design standards through their integration of structures with the natural landform and topography of the site.

The Presidio Planning Team, in conjunction with the firms Land and Community Associates and Architectural Resources Group, is conducting the cultural landscape analysis of the Presidio. The work underway began in the fall of 1990 and is scheduled to be completed in the fall of 1991. The overall objectives of this undertaking are:

- To understand the evolution of the Presidio's built environment from 1776-1990, by tracing primary landscape components over time;

- To conduct a condition assessment of the cultural landscape today and identify extant primary landscape components, Presidio-wide as well as within sub-areas;
- To identify a level of sensitivity for change in sub-areas;
- To evaluate those extant components and determine what characteristics should be encouraged for preservation and enhancement;
- To identify areas requiring further study before additional planning and implementation begins.

In meeting the five objectives outlined, information will be obtained and applied in the planning process for the Presidio. Some specific examples include the perpetuation of important land use patterns; the preservation of significant building clusters and their related small scale features, as new uses and leases are established and the rehabilitation of buildings begins; enhancement of historic circulation networks and entryways while upgrading the safety level of roadways; and reestablishing important historic vistas and visual linkages. Additionally, this information will be applied to the forest management strategies for reforestation and the potential enhancement of significant natural resources, such as drainages and water systems.

Landscape Chronology

The first step involved identifying the landscape components which defined the character of the landscape at a number of important points in history. Subsequently, the manner in which the Presidio's landscape, and these components, evolved from 1776-1990 was traced. This documentation was derived from readily available resource materials which included historic maps, photographs, and limited written records. Eleven period maps were prepared for this exercise. The physical landscape components identified included:

- Boundaries
- Surface water (including lakes and ponds; springs; perennial and intermittent streams and creeks)
- Tree cover
- Buildings
- Circulation (including vehicular, pedestrian and rail systems)
- Structures and miscellaneous elements (including earthworks, dams, cut and fill areas, coastal defense batteries; aids to navigation; storage tanks and reservoirs; wharves and piers; fencing; freestanding and retaining walls; bridges; tunnels)
- Topographic modifications
- Land uses
- Utility systems

Condition Assessment

The second step involved conducting a condition survey of the Presidio's landscape components. Based on an analysis of the components mapped in the first step, the Presidio's 1400 acres were broken down into sub-areas and the primary landscape components were documented and assessed for their current conditions. A preliminary determination of significance and an assessment of integrity for these sub-areas also was made.

Future efforts will involve plotting information on remnant native plant communities and historic scenic vistas and viewsheds. In addition, information regarding the Presidio's architecture, archeology, and historic events will be integrated into the condition assessments for the different areas.

Sensitivity to Change

Once all of the resource information is mapped and further analyzed, each sub-area will be rated according to its level of sensitivity for change. This rating will incorporate the findings of the individual component analyses that make up an area (historic events, structures, landscape features, and archeology) and be based on an assessment of how intact or compromised certain areas are in comparison to their historically significant values. This information will be instrumental to the planning team as it will start to suggest potential management zones for the Presidio.

Components for Preservation/Enhancement

The next task of this phase of work will be to determine the primary cultural landscape components, or character defining features, whose preservation or enhancement is critical to an understanding of the "essence" of the Presidio. These components provide the physical context which is essential to understanding the Presidio of the past.

Areas for Further Study

The cultural landscape analysis is only a first step in providing input into the GMP planning process. Due to the scale and complexity of the Presidio, additional research and analysis will undoubtedly have to be done prior to any additional planning. However, information gained from the cultural landscape analysis will be extremely useful in guiding future research and planning efforts, including potential treatment and management options, design guidelines for future development, and interpretation.

The Presidio's cultural landscape is a critical, unifying element that provides an understanding of the beliefs, attitudes, traditions, and values of the three cultures that have occupied the site. The complex layers of resources, deposited over the course of 200 years, are the physical evidence as to how the site was occupied, developed, used, and shaped to serve its inhabitants' needs. Throughout its history, the Presidio has been a distinct but integral part of San Francisco. Today it serves as a major open space within a dense urban context offering unique recreational and scenic resources due to its location and setting.

The analysis of the cultural landscape provides a holistic understanding of the interrelationships between the built and natural resources that affords many opportunities to the planning process. It can be an effective tool for integrating the past, present, and future, as well as for integrating cultural, natural, and recreational values in a win-win solution. As a result, the incorporation of the landscape analysis into the GMP planning process at the Presidio could prove to be a model for future planning efforts. Stay tuned!

For more information, please contact the National Park Service, Presidio Planning Office, Presidio Station, PO Box 29022, San Francisco, CA 94129.

Carey Feierabend is a historical architect on the Presidio Planning Team.

NPS Pacific Northwest Region Cultural Landscape Inventory

Cathy Gilbert

Last year the Cultural Resources Division in the Pacific Northwest Regional Office of the National Park Service initiated the first phase of a multi-year, region-wide cultural landscape inventory. Although the region has completed a number of cultural landscape reports over the years, this was the first attempt to develop a comprehensive program and systematic process for identifying cultural landscapes in every park unit. The need for such an inventory has been apparent for several years, especially when considering the number of compliance actions impacting site character and fabric, the general lack of baseline data from which to make responsible decisions, and the impacts associated with daily maintenance activities that often jeopardize the integrity of these resources. The overall goals of the inventory are:

- to identify the type, location, and extent of cultural landscapes in the region;
- to document the character-defining features and patterns that comprise the landscape, and;
- to evaluate and assess the significance of landscape features, and determine the National Register eligibility of the landscape.

Although landscape architects will take the lead, the project is interdisciplinary, drawing on the expertise of historians, anthropologists, historical architects, and archeologists.

During the first year of the project, a considerable amount of time was devoted to exploring a workable format and technique for site documentation that had application to a broad range of landscapes. In this regard, it was important that the project focus on a park, or collection of sites, that represented diverse landscapes and conditions. After a general overview of regional parks, and consideration of the specific goals and objectives of the project, the decision was made to concentrate the initial inventory work in Olympic National Park in Washington. In general, Olympic was a good choice because the park offered a large diversity of potential sites, with several historic contexts, and it contained a variety of environmental systems and conditions. Olympic also fit our project needs because the baseline documentation for the park, although completed many years ago, was very good. This gave us a place to start our investigation. As planning for the work progressed, the project broke out into three parts: historical research, field investigations and site documentation, and preliminary analysis and evaluation.

Preliminary background research focused on the review of secondary documents, planning reports, special resource studies, and limited investigations into primary source material. In the course of reviewing the documents, a work sheet was developed to expedite the organization of information. The work sheet itself addressed site specific information including the name of the park and site; the reference document (or building number associated with recording the site); the classification or type of cultural landscape (designed, vernacular, historic site, and/or ethnographic site); the type of significance; and space for writing a brief site history and/or feature summary. The work sheet served as a tool for classifying potential sites, and determining a priority for survey. Two landscape architects worked part-time over a one-month period, reviewing the Historic Resource Study, the Historic Building Inventory, the List of Classified Structures, and numerous archeological reports. Although these reports were helpful in identifying potential sites, none of the documents addressed cultural landscape resources specifically and, as a result, only landscapes that were associated with historic buildings or archeological sites were identified using these sources. Information relating to additional sites was provided by park staff. This

information proved to be most helpful, as back country rangers and resource management staff shared their observations, discoveries, and general knowledge about sites scattered throughout the park. Based on this research, the team identified 88 potential cultural landscapes in Olympic including back country homesteads, CCC campgrounds, NPS administrative areas, former Forest Service complexes, 19th century resorts, and several landscapes with ethnographic value. Considering that the region previously recognized only a handful of sites in the park as having cultural landscape value, this was quite a shock. In addition, because this list was based on a first cut through secondary sources, it was apparent that additional research could reveal other sites (as well as eliminate some sites on the list—many of which were listed as "marginal" due to loss of integrity in the rough environment of the Olympics).

The number of sites and their range throughout the park led to the development of a priority system. From the work sheet, sites were given a priority number based on historical associations and potential threats to the resource. For example, sites that were listed as potential cultural landscapes because they were associated with a historic building were given the highest priority. If the building was determined not eligible for the National Register (as documented in the Historic Building Inventory), the associated landscape was given a higher priority number because, in most cases, the landscape had not been documented or evaluated and was subject to neglect or abandonment. This was especially critical when considering the tendency to focus on the significance and integrity of structures as isolated resources. In a cultural landscape, the individual structure is often regarded as one of many site features and evaluated in the context of the landscape as a whole. As a result, many buildings determined not eligible for the National Register may have value as part of a cultural landscape. In other cases, if the building was listed in the National Register, the associated landscape was given a lower priority number because it was likely that the building and adjacent landscape were being preserved. Other priority numbers were given to sites in ruin but with historic archeological resources, non-NPS sites within park boundaries, trails, and sites with no apparent historic significance. All of these sites were then plotted on a USGS map, which was used to determine the concentration and location of sites to be inventoried.

The actual inventory of potential cultural landscapes in Olympic took place over the summer. A landscape architect and a historian, both graduate students, were stationed in the park and the park anthropologist joined the team part-time to assist in the identification and documentation of ethnographic landscapes. It was clear from the beginning that the team would not be able to document all 88 sites identified. The choice was to try to document all number one priority sites (scattered over the entire park) or to select one area with many different types of landscapes. After some discussion, the team decided to focus their efforts on one drainage with a cross-section of sites and environmental conditions. The Elwha drainage on the north side of the park was selected because it was easily accessible from the park headquarters area, the history of the valley was well documented, and there were 26 sites located along the valley. An inventory card was developed in the regional office and field tested with the team and, after several revisions, the card was finalized for use during the project. Historical research was conducted in the park and, using park archives, photographs, and oral interviews, brief landscape histories were compiled for each site. Field work at each site allowed the team to record cultural landscape features and characteristics at several scales, develop a site map, and photograph significant landscape patterns and relationships. A drawing of a section of the site also was developed to illustrate the relationship of the site to the surrounding landscape and define boundaries. All written and graphic information was compiled on the inventory card, which will serve as the basis of an evaluation of the significance of the landscape.

Although one of the goals of the project was to complete an evaluation of the significance of all 26 sites in the Elwha District, it was evident that additional information would be necessary prior to assessment. In many cases there wasn't enough time, or information, to complete historical research, leaving large gaps in our ability to assess value.

This may prove to be a common problem when documenting cultural landscapes in large parks like Olympic. Homesteaders and early pioneers settling in the interior portions of the Olympic Peninsula were usually more focused on survival than record keeping. Although letters and travel accounts provide insight to the lifestyle and general character of the landscape, no clear picture of the site through time emerges. In addition, due to the invasive and dominant natural environment in Olympic, many of the sites inventoried during the summer had marginal cultural landscape integrity. This, in turn, limited our ability to gather significant physical evidence from the site, and led to several sites being designated as historic archeological sites, requiring different documentation and evaluation criteria, both beyond the scope of this initial effort. The lack of site specific data for individual sites raised several questions about the general organization of the inventory, the definition of site boundaries, and the components that contribute to landscape significance. While some sites formed discrete landscape units and could be documented easily, others were best considered and documented as they contributed to overall historic settlement patterns in the valley. This is both an issue of scale and of resolving historical contexts. It is anticipated that this will be a common problem in the region-wide cultural landscape inventory, especially considering that much of the information relating to cultural landscapes has not been synthesized and is generally missing from park records.

In the end, the process for identifying potential cultural landscape resources in the region was a good one. In application, it is only a first step. Next year, additional sites will be documented and more time will be spent on historical research and the development of historical contexts, prior to field investigations. The region also will be working closely with the Park Historic Architecture Division in Washington and other regions in the development of the Servicewide Cultural Landscapes Inventory, a computerized, evaluated inventory of significant NPS landscapes. Compiling this database will provide a remarkable opportunity to consolidate and generate critical data on significant cultural landscapes in this region and throughout the country.

Cathy Gilbert is the historical landscape architect in the Pacific Northwest Regional Office, National Park Service.

The Evolving Landscape at Cuyahoga Valley National Recreation Area

David T. Humphrey

It has been almost 17 years since the enabling legislation that created Cuyahoga Valley National Recreation Area was signed by President Gerald R. Ford on December 27, 1974. However, the effort to create a federally-managed preserve in northeast Ohio did not happen overnight. In fact, the concept of preserving the special qualities within the Cuyahoga River Valley had its roots in the early part of the 20th century. Local efforts to preserve portions of the valley near Cleveland and Akron, Ohio resulted in creating units of both the Cleveland and Akron Metropolitan Park Districts in 1917 and in 1921, respectively. The park board of the Akron park system contracted with the Olmsted brothers of Brookline, Massachusetts in September, 1925 to prepare a master plan that clearly defined within its scope the floor of the Cuyahoga River Valley and some of its tributaries as land that should be preserved as a public park or parkway.

In the decade of the '60s, there was considerable pressure to develop more of the valley and adjacent area for commercial and residential purposes. It was during the 1960s that the state of Ohio, recognizing the significant natural and cultural resources of the area, conducted a study to evaluate the potential of the valley for open space and recreation use. At this same time, the two local metropolitan park districts and the state began to work on a concerted effort to preserve land in the valley. Investment of public funds was begun in 1969 using Land and Water Conservation Funds for acquisition of lands within the valley itself. The study and acquisition efforts had the net result of focusing public attention on the preservation of the valley and ultimately a request to the National Park Service by U.S. Representatives John Seiberling, Charles Vanik, and Ralph Regula to have the Cuyahoga Valley included as a unit of the National Park System.

So pervasive are the extant historic and prehistoric resources of the valley that early versions of the enabling legislation for the park referred to it as the Cuyahoga Valley National Historical Park and Recreation Area. It is this richness of historic resources that has helped to drive NPS efforts to develop plans for preserving and interpreting as many of the cultural resources as possible at the recreation area. A significant part of the scene at Cuyahoga is the land itself. Although surrounded by urban development, a remarkable degree of the valley's rural agricultural character of over a century ago still remains. This is exhibited in the 90-plus sites and structures that are now listed on the National Register of Historic Places and the fact that over 250 structures within the park are listed on the NPS List of Classified Structures. Many of these structures directly relate to the agricultural history of the valley. Some date back to the era of the Ohio and Erie Canal that was completed through the valley by 1827.

The Cultural Landscape

In the 1977 General Management Plan for the recreation area, it is suggested that agricultural landscapes, as well as prehistoric resources, be carefully preserved and imaginatively interpreted to ensure that they become an integral part of the Cuyahoga environment. To that end, a Cultural Landscape Report was prepared and approved in 1988. Six primary themes established the parameters for evaluating the cultural landscape. They are: prehistory, settlement, transportation, agriculture, industry, and recreation. As described in the report, many archeological sites and historic structures had been previously documented in the recreation area. The report takes a broader look at the land which supported these prehistoric and historic sites and at the ways in which previous human actions have affected the spaces between the sites. Report recommendations specifically

address the preservation of these sites and their associated land. Of special importance is the preservation of former farm fields.

In northeast Ohio, woody brush can take over an abandoned farm field through natural succession in 5 years; partial second-growth canopy can develop in 15 years, and a mature second growth forest can exist in 50 years. Since economically viable farming in the valley generally ceased on a wide scale in the 1930s, much of the 19th century farmscape has been irretrievably lost. Only privately farmed lands or remnant fields remained when the park was created in 1974. These remnant fields have been carefully studied and their history researched to determine how best they should be managed for preservation. Management action focuses on several strategies for preservation: periodic mowing, pasturing or haying, agricultural crop production, and maintained lawn in areas to be developed. Other actions to be considered as a result of the study were to allow fields to go into natural succession, to develop them for other park purposes, or to stabilize them due to steep slope or poor soil conditions.

Implementation

In the early days of the park's history, it was determined after initial research that many remnant fields should be put back into agricultural production as soon as was practicable. The easiest method to accomplish this today in the National Park System, is to issue a Special Use Permit (SUP) for agricultural use of the land based on the appraised fair annual rental for the acreage. Authority to issue the SUP is in the park's enabling legislation (16 U.S.C. 460ff) and the Secretary of the Interior's Authorization of Activities (16 U.S.C. 1(a)(2)(g)). The later authority allows the proceeds generated to be credited to the park for use in preserving and interpreting the historic scene. At the present time, Cuyahoga Valley is working with three separate farmers to put 253 acres of fallow agricultural land back into production under the provisions of these authorities. The park has also had a five-year lease approved that used 36 CFR Part 17, Conveyance of Freehold and Leasehold Interests on Lands of the National Park System and 16 U.S.C. 1(a)(2)(g), but the time required to implement the program using this authority is considerably more lengthy. In all cases the appraised fair annual rental of the acreage must be used. At the present time, the park is pursuing possible arrangements with other local farmers who are interested in farming Federal land and in so doing assisting the park to preserve the historic scene. That challenge continues to be more difficult as less and less farming is being done in the urban area that surrounds the national recreation area.

To assist in the marketing required to make land available for farming, the park's Maintenance Division has been directed to proceed with the clearing of lands determined to be critical to the preservation of the cultural landscape as outlined in the Cultural Landscape Report. In 1990, 120 acres were cleared of herbaceous and woody vegetation. An additional 350 acres is programmed for clearing this calendar year.

Coordination

Cuyahoga Valley's cultural landscape management effort has been developed and coordinated with the park's Resource Management Division. The resource management team provides continuous guidance for proper crop rotations and integrated pest management. Other alternative strategies for managing the land, such as controlled burns, have been considered but not implemented due to the proximity of urban development.

The Future

Ultimately the park's goal will be to maintain a total of 1400 acres of land identified as contributing to the cultural landscape. Although a small percentage of the park's total acreage, the fields which make up the cultural landscape are perhaps the most visible in the

Cuyahoga Valley. This is especially true in light of the urban context within which the park now resides. Implementation of the CLR is likely to take several years to complete as budgetary constraints allow only a portion of the program to be implemented each year. Great strides have been made in the last couple of years, however, and will continue to be made to preserve this important part of the past at Cuyahoga.

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Cultural Landscape Program Development the NPS Midwest Regional Office

Mary V. Hughes

In January, the Midwest Region became the third regional office in the National Park Service (NPS) to establish a full-time position for a professional cultural landscape specialist. The regional cultural landscape architect is responsible for developing a regionwide program of cultural landscape management and for providing technical assistance to 33 parks, assisting park managers in the identification, assessment, and treatment of cultural landscapes. Additional duties include the review of draft planning and design documents for accuracy, adequacy, and compliance with historic preservation laws, policies, and guidelines as they relate to cultural landscapes. Coordination of training opportunities and dissemination of information on cultural landscape topics are also included in the responsibilities of the position.

The program evolution in the Midwest Region parallels the course of progress nationally in the recognition of landscapes as a resource reflecting the patterns of our national heritage and values. The NPS revised cultural resource policy and guidelines in the 1980s to address cultural landscapes, which were first classified as a distinct type of cultural resource in the agency's *Cultural Resources Management Guideline, NPS-28* in 1981. During this period, the Midwest Regional Office produced several documents addressing cultural landscape issues. Randall J. Biallas, regional historical architect in the Midwest from 1977-1980, initiated the first of these studies. Under his direction, the MWRO contracted with Robert Harvey, a landscape architecture professor at Iowa State University, to prepare a historic grounds report for Lincoln Home National Historic Site, which he completed in 1982. Professor Harvey then prepared construction documents to guide landscape restoration at selected properties within the historic district. Although these plans were never implemented, some landscape reconstruction was undertaken at the Lincoln Home itself in conjunction with the building restoration. Between 1981 and 1990, the Apostle Islands National Lakeshore contracted with the University of Wisconsin for a series of studies to document early agricultural activities on several islands in Lake Superior; however, no management recommendations have been formulated for these farmsites to date. Another park-based cultural landscape initiative occurred at the Cuyahoga Valley National Recreation Area, where park staff prepared a cultural landscape report in 1988. In 1984, Jill York O'Bright, then regional historian, completed a historic grounds report for Lincoln Boyhood National Memorial which provided a basis for restoration of the allee and other features of the historic designed landscape of the memorial grounds. Landscape restoration plans were prepared in 1985 by seasonal landscape architect Susan Moyle; and Keith Krueger, regional landscape architect of the Maintenance Division in MWRO, later completed construction documents for this project, which was implemented in 1988. In 1989, Keith also collaborated with MWRO historian Ron Cockrell on a cultural landscape report for the Truman home in Independence, Missouri.

Several cultural landscape training courses have also been offered in the Midwest over the past decade. The first national NPS workshop on the topic was held at Sleeping Bear Dunes National Lakeshore in the spring of 1986. Course participants applied the principles outlined by Robert Melnick in his 1984 study *Cultural Landscapes: Rural Historic Districts in the National Park System* to a rural historic district in the park, the German farming community of Port Oneida. Following this workshop, seasonal historian Scott Searl and landscape architect Michele D'Arcy prepared several chapters of a cultural landscape report for Port Oneida based on Ron Cockrell's special history study of the area (1983). After a

few years' hiatus, the documentary research and field data are currently being integrated into a single document. Under the leadership of Andy Ketterson, chief of the Division of Cultural Resources Management (CRM), the division also organized a cultural landscape session in 1988 for the National Parks and Recreation Association convention in Indianapolis. This program increased the visibility of NPS leadership in cultural landscape preservation among state and municipal park managers. The MWRO included a session on cultural landscapes in the training course, "Cultural Resources for Managers," held in Omaha in 1988. The presentation led by Cathy Gilbert of the Pacific Northwest Regional Office heightened the participants' awareness of the potential cultural value of the rural midwestern landscape, creating a demand for more professional guidance in this area from regional office personnel.

Incrementally, each of the efforts outlined above contributed to an increased demand within the region for a more systematic program of technical assistance and training to support management of a resource that had recently gained Servicewide recognition as a cultural resource. Although there were several cultural landscape studies completed in the decade of the 1980s, implementation of management recommendations lagged behind because there was no one with the specific responsibility for cultural landscape projects. It became increasingly apparent there was a need to fill the gap in professional services offered by the regional office. In FY 1990, the CRM division added a base-funded regional cultural landscape architect position. The most pressing need of the new program is to identify the nature and extent of cultural landscape resources in the region's parks. Last summer, a seasonal landscape architect initiated a survey of planning documents to identify areas within each park appearing to fit the criteria for the five categories of cultural landscapes as defined in NPS-28: historic scene, historic site, historic designed landscape, historic vernacular landscape, and ethnographic landscape. Basic information on each potential site was then recorded on a 5" by 8" index card to serve as a reference for the next step in the process, the field inventory and preliminary research necessary to make judgments regarding boundaries and the potential eligibility of each landscape for the National Register. Information collected in this phase of the program will be recorded in the Cultural Landscape Inventory (CLI), a computerized national database being developed by the NPS.

The CLI, scheduled to be initiated in FY 1992, will parallel the List of Classified Structures in serving as a cultural resource management tool. Once the significant cultural landscape resources have been identified park managers will have a basis for establishing priorities for further studies and treatment plans. On the regional level, the information provided in the CLI will help to establish budget levels and indicate the need for additional cultural landscape staff to complete project work. Understanding the regional scope of cultural landscape resources will provide a rational and fair basis for allocating resources to address site-specific needs in the parks of the Midwest.

Throughout this program development process there will be an on-going need for training opportunities, not only for park managers and designers, but also for maintenance workers and interpreters who are the "front line" forces involved with the preservation of cultural landscapes. Successful preservation and restoration of cultural landscapes will require new knowledge and horticultural skills on the part of grounds managers at parks of all sizes. From the care and propagation of a single historic "witness" tree to the preservation of many acres of open fields in a rural historic district, the integrity of the historic scene depends on the daily application of judgment and skills on the part of park maintenance crews. Interpreters, in turn, face the challenge of conveying to the public an understanding of cultural values in the landscape which most people appreciate, if at all, merely as pretty scenery. To do this, the interpreters must themselves be informed about and involved with cultural landscape issues. As the cultural landscape program develops and matures, the program manager will probably serve increasingly as a facilitator for discussion among a multi-disciplinary team representing the diversity of skills and concerns involved with the management of a complex dynamic system that is both a cultural and a natural resource.

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Managing Cultural Landscapes in the Canadian Parks Service

Susan Buggey

The Canadian Parks Service proposed new policy, released for public discussion on July 21, 1991, defines "cultural landscapes" as "any geographical area that has been modified or influenced by human activity" (p.113). Within Canada's national parks and national historic sites, a number of landscape types can be identified within this broad scope: **natural landscapes** used and altered by native peoples; **designed landscapes** which derive value from their aesthetic qualities; **vernacular landscapes** associated with the country's demographic, social and economic development; **historic landscapes** which are valued primarily for their historical associations; and such specific landscape types as **cemeteries, canals, and fortification earthworks.**

The Canadian Parks Service (CPS) manages cultural landscapes within the context established by its Cultural Resource Management (CRM) policy (1990). This policy directs that cultural resources are managed in accordance with international norms such as the Venice and Florence Charters. The CRM policy expresses the core principles as: value, public benefit, understanding, respect, and integrity.

Identification

CPS has two processes for the identification of value in landscapes. At the highest level the Historic Sites and Monuments Board of Canada, an independent advisory board to the Minister of the Environment, may recommend that a landscape is of national historic significance. Working with criteria that recognize aesthetic, scientific, and historical values, the Board has identified such landscapes as urban parks, a seminary garden, a cemetery, residential landscapes in the Gardenesque, Picturesque, and Italianate styles, and the grounds of Parliament Hill as having national significance. No sites explicitly designated as landscapes having national historic significance are, however, currently owned by CPS. For landscapes owned by the Parks Service which have potential historic value but have not been identified as having national historic significance, the CRM policy provides for evaluation of the nature and level of heritage value. Review under the Federal Heritage Buildings Policy, similar to Section 106 review, does not currently provide for the evaluation of landscapes except in their association with buildings.

Research

Archeologists, historians, landscape architects, geographers, horticulturists, and maintenance staff are all involved in the research required to understand and manage our historic landscapes. To identify values and to manage landscapes in accordance with accepted conservation principles, CPS carries out historical and archeological research, as well as on-site and comparative investigation, including heritage recording. Research aids design development, maintenance, and visitor management. At the 18th-century French fortress site at Louisbourg, for example, documentary research on garden character was accompanied by archaeological seed analysis to identify authenticated plants for replanting gardens in the reconstructed townsite. At the Motherwell Homestead National Historic Site near Abernethy, Saskatchewan, research for restoration of the site to 1912 focused on historical analysis of its representativeness as a Prairie homestead site and subsequently on the features, including the specific plants, by which W.R. Motherwell sought to recreate and adapt the more verdant and smaller scaled landscape of his home in central Canada on the Prairies. At Bellevue House National Historic Site in Kingston, Ontario, a period landscape

character has been rehabilitated to complement the handsome Italianate townhouse where Canada's first Prime Minister lived in 1848-49. A horticulturist is currently identifying and analyzing plant availability for the region for the period of site significance.

Management

CPS's CRM policy directs that "a cultural resource that derives its historic value from the interaction of nature and human activities will be valued for both its cultural and natural qualities" (sec. 1.1.5.). This scope provides for clearer recognition of cultural landscapes within the Parks Service than in the past. Moreover, the policy provides a framework for decisionmaking that will affect cultural resources (sec. 2.0):

- an inventory of resources
- evaluation of resources to determine which possess a level of value that warrants protection and what it is that constitutes their historic value
- consideration of historic value in actions affecting conservation and presentation
- monitoring and review to ensure that conservation and presentation objectives are effectively met

To date, an inventory of cultural landscapes in CPS has not been prepared nor have criteria for the evaluation of landscapes been developed. The first biennial State of the Parks Report (1990) identified that "historic landscapes and cemeteries have not been systematically documented, and information on their condition is incomplete. Landscapes have frequently changed substantially over time. Human intervention, or the lack of intervention in the cycle of natural growth, change and erosion all combine to alter the nature of cultural landscapes" (vol.1, p.36).

Nonetheless, period landscape architect Linda Fardin, and landscape architects in our five regional offices, have translated conservation principles into the technical and professional practice of historic landscape preservation for our sites. Existing procedures have provided for management of a number of aspects of recognized cultural landscapes. Under the National Parks Act (1988) and CPS policy, each site must have a management plan to direct the focus of operations. Cultural landscapes are increasingly recognized under such plans. The interdisciplinary planning team which develops these plans must identify the site objectives which will guide the nature of intervention. They may face such issues as defining the appropriate recognition of cultural and natural resources in a national park whose primary role is to represent one of Canada's natural regions but which possesses among its resources a designed landscape of significant distinction as in the Gardens of Time at Banff or the English Garden at Wasagaming or agricultural landscapes as at Point Pelee and St. Lawrence Islands National Parks.

Plans must also respond to the need to define the appropriate balance between protection of the site and its presentation to the public. Thus, "the Canadian Parks Service must respond to the needs and interests of the visitor while safeguarding the fragile and irreplaceable resources being visited" (CRM policy, p.2). For example, visitors may perceive long grass as neglected maintenance. Enhanced visitor information programs can increase awareness of the historic character of the site and thus of the appropriateness of the treatment. Such better understanding of site intentions also addresses morale problems among maintenance staff that derive from visitor complaints about inadequate maintenance. Some maintenance activities, such as scything, are presented as interpretation activities.

Implementation of the management plan may bring forth a number of landscape management issues. At Batoche National Historic Site, for example, the objective of enhancing visitors' experience of the prairie landscape by increasing the length of existing grasses raised questions as to how the risk of fire and the spread of noxious weeds to neighboring properties would be controlled. A fire management plan, developed with the expertise of park wardens at nearby Prince Albert National Park, has enabled the site to maintain a grass level that evokes the traditional rural landscape of the Metis community commemorated. Lower Fort Garry, a fur trade fort north of Winnipeg served as the Manitoba Country Club for 40 years earlier this century and retained the mature trees and

extensive flower beds of its ornamental landscape when it became a national historic site to commemorate the Western Canadian fur trade. Implementation of landscape designs accurate to the fur trade era meant removal of the flower beds and trees, both very popular with the visiting public. Resolution was found in the decision to remove the trees only when the deteriorated condition indicated end of life cycle. Ornamental flower beds were planted in the site's contemporary zone, and the historic grounds replanted to appropriate character for the site interpretation focus of the early 1850s.

Once site development has been implemented, maintenance is the *sine qua non* without which the dynamic nature of a landscape may soon change its character. As the CRM policy states, "respectful, preventive and continuing maintenance will form an indispensable part of cultural resource management" (sec. 1.4.2). Technical maintenance manuals for historic landscapes, in accordance with the Service's maintenance management system, have been prepared for some sites. Such guidelines, which are specific to each site, identify the maintenance activities required to maintain the historic character of the property: activity, objective, recommended procedure, including period techniques where appropriate, necessary tools, frequency and timing of tasks, and staff resources to carry them out. The challenge in preparing such manuals is to organize and present the necessary information in a compact, usable fashion convenient to the user who is responsible for site maintenance.

The Canadian Parks Service recognizes cultural landscapes in both its national parks and its national historic sites. The new CRM policy provides both focus and opportunities to enhance the management of our cultural landscapes.

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Visitor Wear and Tear of Cultural Landscapes: Recommendations for Stonehenge

Kate Ahern

William Stukely was a regular visitor to Salisbury Plain in the early 1700s. He gives an account of the landscape at Stonehenge: "short grass continually cropt by flocks of sheep composed of the softest and most verdant turf extremely easy to walk on and which rises as with a spring under one's feet." Any late-20th-century visitor to the monument would not recognize this description. The site had become severely worn by the passage of three quarters of a million pairs of feet every year, resulting in mud and puddles in wet weather and dust bowl conditions when dry. The loss of protective grass cover and cycle of compaction, drying, and erosion of the thin chalky soil, exacerbated by minimal grounds maintenance, had caused rapid degeneration of the landscape around the stones. The resulting scene was considered to be wholly inappropriate for the presentation of a monument designated by UNESCO as a World Heritage Site.

Erosion by visitor use is becoming increasingly common at many historic landscape sites. Recognizing this problem, English Heritage, the government agency responsible for the preservation of architectural and archeological heritage, initiated a study in 1988 to examine the types and incidence of landscape wear and tear at four historic properties. The sites included a Roman Hillfort and Castle in the North East of England and Stonehenge, a Neolithic monument in Wiltshire. The aims of the research were to monitor wear in relation to visitor pressure and prescribe appropriate remedial treatments. It was envisaged that the results would also be applicable to the management of other sites where the landscape is suffering damage from overuse. Therefore, the work formed part of a comprehensive study of the effects of tourism on the wear of monuments, buildings, and gardens compiled by the International Council on Monuments and Sites (ICOMOS). Of the four sites monitored, Stonehenge exhibited the most extensive problems. This article describes the past management, present research, and future proposals for Stonehenge.

English Heritage is presently undertaking a systematic reappraisal of Stonehenge, with the aim of reuniting the monument with its surrounding landscape. The main objective is to relocate the visitor and interpretive facilities away from the monument, one kilometre north of their present position. Visitors would then be able to approach Stonehenge from the Avenue, the original prehistoric route to the Stones, and be able to appreciate the scale of the monument and understand that it is only one element in a dramatic archeological landscape which includes the Great Cursus and a series of Neolithic and Bronze Age barrows. These possible future changes have tempered the proposals made in the wear and tear study. Past management solutions at the site may be briefly reviewed to put the current work in perspective. The landscape of Stonehenge has been a center of attraction since before 3000 BC, as a focus of political power and religion. The monument is shrouded in myths and legends which throughout history have drawn visitors to the site. For hundreds of years people have come to the monument for sunrise and sunset at the solstices and equinoxes. During this century, Stonehenge has become an international tourist attraction. Over the last 30 years, the number of people coming to the monument has risen to such proportions that visitor management has become increasingly necessary. Unrestricted public access to the stone circle had caused erosion to the extent that the stability of the stones themselves was being undermined. Since the 1960s, visitors have been directed away from the inner circle. The present access route is by way of a tarmac path which crosses the outer

bank and ditch to within 20m of the stones, it then recrosses the earthwork and for the main part of the route as a grass path all the way around to the Heel Stone. Visitors are channeled within a band of 15 to 20 metre width between an inner rope fence along the earthwork and a second fence installed by a farmer who holds a grazing license for the remainder of the field. For archeological reasons, the route does not make a full circle and people are required to turn back on reaching the Heel Stone, effectively doubling the amount of wear.

As a basis for making recommendation for remedial treatments, visitor use of the site was monitored over a six-month period and correlated with grass wear and tear. Twenty experimental plots were set up to assess the rate and extent of wear and ability of the grass to recover from sustained trampling. On each monitoring visit, the percentage of root, grass, and bare ground were assessed within each square. The results for six of the plots are illustrated in figure 1. The most dramatic loss of cover in plot no. 18 was caused by a Druids' ritual burning ceremony within that square. Overall, the monitoring demonstrated the resilience of the grass despite a lack of maintenance.

The daily distribution of visitors (figure 2) showed consistent peak between 11:00 a.m. and noon, with the arrival of the majority of coach parties from London. On site, people tended to walk within two metres of the inner rope fence on their outward journey around the monument and spread out across the path on their return journey. The average length of stay on site was 15-20 minutes. A number of specific points were identified where groups tended to congregate, for example, the sunrise alignments and best spots for taking photographs. These areas were subject to greatest wear and tear. Over the year, visitor numbers were at a maximum in the summer months with approximately 3000 each day in July, dropping to below 500 a day in December. On a weekly basis, the pattern of use showed lowest numbers on Mondays building up to peaks at the weekend.

Generally, weather had very little impact on the number of visitors. However, rainfall was shown to be the key factor affecting the rate of grass wear. During wet weather, the ground became very muddy under trampling pressure, the grass sheared off underfoot, and the soil also became smeared and compacted. The experimental work showed that in dry conditions the grass could withstand approximately 60,000 visitors, equivalent to two and a half weeks or continuous use. In wet weather fewer than 1,000 visitors, or only one day of wear, was enough to cause significant damage to the grass.

The results of the monitoring indicated that a grass cover might be sustainable with proper repair, visitor management, and intensive grass maintenance. It was felt that, ideally, Stonehenge should be presented within its natural chalk grassland setting. A hard wearing grass path was considered to be most appropriate for the site, since a surfaced path would be both visually intrusive and incompatible with future plans for relocation of the visitor centre.

To this end, four 4 x 5 metre trial plots were established to test different types of reinforcement material, grass types, and management regimes. The performance of the trials under different conditions was closely monitored over the following eight months. Although all the trials exhibited some degree of wear, the overall results indicated that a natural grass walkway could be sustained around Stonehenge. Good grounds management was considered to be the key to maintaining the grass cover.

Based on these experimental results, it was recommended that the entire path area should be restored to grass. Reinforcement was recommended for the areas of heaviest wear to bear the load of trampling and prevent compaction of the soil beneath. A thin synthetic "carpet" proved most successful in the trials. This material allowed grass to be seeded both below it and into it, producing a tightly knit vegetation cover so that, even if the surface is worn, the roots below the material are protected. The remainder of the site was leveled, decompacted, and turfed. For both the seeded and turfed area, the grass mix was based on the three top rated cultivars of *Lolium perenne* on the Sports Turf Research Institute merit list. These have been proven to have good results in areas of very intensive wear, such as the goal areas on sports pitches.

Some ground rules for maintenance of the grass cover were drawn up based on the performance of the trials. They fall into three categories: regular maintenance, rope movements/rest, and repair.

Regular maintenance. An intensive grass maintenance regime is essential to maintain grass under heavy use. The main components of such a regime include the following: aeration on a weekly or even daily basis to prevent compaction, frequent cutting during the growing season to encourage tillering and development of a resilient root structure, and light scarification in autumn to prevent the build up of thatch. Spot treatment may be required in spring to remove broad-leaved weeds, such as dock. These plants are very susceptible to wear, leaving a gap in the surface cover which is very quickly eroded by further trampling pressure. Ongoing research has shown the wear tolerance of *Lolium perenne* to be greater with higher rates of nitrogen fertilizer application, up to 200 kg/ha/yr is suggested. Finally, the exposed location on Salisbury plain means that irrigation is essential during dry periods.

Rope movement/rest. It is especially important that the grass is given adequate rest between periods of use. It may require resting after only one day of wet weather or after a week or more of dry weather. At Stonehenge the grass path can be divided into several zones of use which can be delimited by movement of the rope fence, allowing visitors to be easily deflected from one path of grass to the next.

Repair. The trials indicated that with 750,000 visitors some degree of wear is inevitable. A period is required in the autumn to allow the grass to recover and enable essential renovation work and reurfing to be undertaken.

During 1990-1991, these proposals were implemented at Stonehenge. A groundsperson has been employed at the site specifically to oversee the grass maintenance. The area was opened up to visitor use in June 1991, and the maintenance program is currently being assessed and refined. The site now provides an ideal opportunity to experiment with more sophisticated maintenance techniques, the results of which could be of interest to many land managers responsible for other sites subject to wear and tear from heavy visitor use.

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